3 0144 00136100 5



5-197-6



S797w

# statewide outdoor recreation plan

an interim report

#### STATE PLANNING BOARD

Adolph W. Schmidt, Chairman
Theodore L. Hazlett, Vice Chairman
Hon. Joseph W. Barr, Jr.
Harry Boyer
Hon. Joseph S. Clark
Streuby L. Drumm
Hon. Lyle G. Hall
Edward Hopkinson, Jr.
David H. Kurtzman

George J. Mead
Hon. Hugh Scott
Hon. William Z. Scott
John C. Warner
Alfred H. Williams
Hon. Maurice K. Goddard, ex officio
Hon. Henry D. Harral, ex officio
Hon. John K. Tabor, ex officio

Irving Hand, Executive Director
Jesse Nalle, Assistant Director
Michael Foster, Chief, Comprehensive Planning
Mark Heyman, Chief, Research & Capital Program

#### Staff for this Report

Michael Foster, Division Chief William H. Shellabear, Planner II Rajinder N. Chadha, Planner II Charles H. Smith, Planner II Elmo Fleming, Artist-Designer Mrs. Anna Dymond, Supervisor
Mrs. Florence Unger, Secretary
Mrs. Freda Moyer, Composition Typist
Rodney Webb, Clerk
Richard A. Heiss, Summer Intern

The State Planning Board gratefully acknowledges the wholehearted cooperation of Conrad R. Lickel and William C. Forrey, Department of Forests and Waters; James E. Hertz, Department of Commerce; Nicholas I. Vukovich, Game Commission; John Hoffman, Fish Commission; Howard E. Rohlin, Historical and Museum Commission; and the valuable support received from Richard D. Rieke, William D. Barber and John L. Sullivan of the Northeast Regional Office of the Bureau of Outdoor Recreation.

This is an abridgement of the report submitted to the Bureau of Outdoor Recreation in July, 1965.

PY P712.2 S797w Interim



statewide outdoor recreation plan

an Inturim revory



## CONTENTS

1.	Foreword and Summary	Page ]
2.	Background for Planning	8
3.	Towards a Solution	14
4.	The Present and Future Demand for Recreational Open Space	20
5.	The Supply of Recreational Open Space	26
6.	Pennsylvania's Needs for Recreational Open Space	33
7.	The Action Program	37
8.	Following Through	42
9.	Appendix	

## LIST OF ILLUSTRATIONS

Map Number	
1	Forest and Game Lands
2	State Planning Regions
3	Physiographic Areas
4	Regional Setting
5	Population Density by Minor Civil Division 1960
6	Ratio of State and Local Open Space to Population
7	Number of Visitors to State Parks
8	Projected Population Change, 1960-1980, by County
9	State and Federal Parks
10	State Open Space by Planning Region
11	Historic Sites, Current Inventory
12	Local Open Space by Planning Region
13	Vacation Homes, 1950-1960, by County
14	Tentative Statewide Open Space and Recreation Policy Goals
15	Federal Interstate System and Proposed Appalachian Highways
16	State Action Program by Planning Region

Historic Sites, State Action Program

Local Action Program by County

17

18

#### FOREWORD AND SUMMARY

The Pennsylvania "Statewide Outdoor Recreation Plan" was prepared both as a guide for the Commonwealth and to qualify the Commonwealth to receive funds from the Land and Water Conservation Fund Act.

This Act, passed by Congress in 1964, creates a Fund from admission fees to National Parks, receipts from the sale of Federal lands and other sources, to be used at the Federal level and at the State and local level to acquire and develop land for outdoor recreation. The Fund is administered by the Bureau of Outdoor Recreation (BOR), an agency within the United States Department of the Interior. The Bureau stipulated that a statewide plan for outdoor recreation was a prerequisite to receiving grants from the Fund and supplied an outline for the preparation of the plan.

Pennsylvania's plan, prepared by the State Planning Board, carefully followed this outline. It was submitted to the BOR and was approved as meeting its requirements until November 1966. This volume is a somewhat abridged statement of the Plan as it was submitted. This abridgment has not modified the substance or meaning of the Plan as approved.

The State Planning Board, designated by the Governor to administer the Land and Water Conservation Fund Act, prepared the plan with the full cooperation of the Department of Forests and Waters and the Fish, Game and Historical and Museum Commissions. Pennsylvania has

benefitted from the earlier involvement of these agencies in the conception, planning and execution of PROJECT 70, the Commonwealth's \$70 million bond issue to purchase land for recreation and conservation.

This program was presented to the people of the State and obtained a successful vote on the required referendum on November 5, 1963.

Pennsylvania's citizens are thus unusually well informed on the need for supporting outdoor recreation proposals and have already responded in a positive manner. Additionally, the State uses a six year plan for expenditures called the Capital Program to bring planning for future parks to a higher degree of advancement than states not using such measures.

The most important source of data on existing supplies of recreational land was the BOR "Inventory of Outdoor Recreation Areas" plus open space and recreation area proposals already received from local communities which submitted "Statements of Interest" as required by the PROJECT 70 Act. It is significant that the PROJECT 70 proposals exceeded the BOR Inventory by 98,000 acres. Using these data, an analysis of regional distribution was made, population projections were computed on a regional basis and estimates of future demand were derived, for both State and local needs. The State Planning Board had divided Pennsylvania into thirteen Regions, largely on socio-economic considerations. They proved well suited for this analysis, particularly in view of Pennsylvania's contrasting land forms. The State includes both the fast-growing urban areas of Philadelphia and the Delaware Valley (Megalopolis) and the forest-mountain areas of the central part of the State (included in Appalachia). This contrast is best shown by the fact that the 52 Appalachia counties have no more population than the 15 Megalopolis counties and that these latter counties grew by 223,000 persons since 1960 while the other 52 counties lost 83,000 persons.

The Statewide Outdoor Recreation Plan is an interim plan designed to help existing State agencies identify and meet their responsibilities. It also evaluates the sum of existing local plans and the implications of such plans.

To estimate the demand for outdoor recreation areas, the ratio of existing publicly owned open space in acres per 1,000 persons was computed for each State Planning Region (see Map 2). These ratios were then compared to the following standards: for local parks - 15 acres per 1,000 persons; for State parks, 25 acres per 1,000 persons. The results are presented below:

REGIONAL DISTRIBUTION OF POPULATION AND STATE PARK ACREAGE PER 1,000 PERSONS AND CURRENT DEFICITS

REGION	PER CENT OF TOTAL POPULATION	ACRES PER 1,000 PERSONS	ACREAGE DEFICIT
1	32.0	1.3	85,000
2	6.0	9.6	10,860
3	.7	165.7	Fire the same
4	1.3	114.7	
5	7.1	19.6	4,300
6	9,9	7.2	19,900
7	2 , 5	4,9	5,700
8	2.0	124.8	Orași dille dilas
9	l.O	26.3	682 (503 fber
10	1.5	61.5	NOTE With Color
11	4.5	45.2	the the the
12	25.5	4.5	59,100
13	6.0	39.0	
STATE	100.0	15.1	112,049

While there are 270 acres of State <u>land</u> per 1,000, there are only 15 acres of State <u>parks</u> per 1,000 - slightly more than half the

recommended minimum. The regional differences are substantial.

No region had enough local parks to meet the suggested minimum.

The following table shows this, and the regional differences as well.

REGIONAL DISTRIBUTION OF POPULATION AND LOCAL PARK ACREAGE PER 1,000 PERSONS AND CURRENT DEFICIT

REGION	PER CENT OF TOTAL POPULATION	ACRES PER 1,000 PERSONS	ACREAGE DEFICIT
1	32.0	4.9	36,200
2	6.0	6.5	6,000
3	. 7		1,200
4	1.3	1.9	1,900
5	7.1	.8	11,500
6	9.9	2.2	14,300
7	2.5		4,200
8	2.0	2 . 4	2,800
9	1.0		1,700
10	1.5		2,500
11	4.5	1.2	7,000
12	25.5	4.9	29,000
13	6.0	3.0	8,200
STATE	100.0	3.8	126,600

These figures are based on today's population. Given the increased visitation rate shown below, and the increased population, 1980 will have an expected increased deficit.

#### VISITORS TO STATE RECREATION AREAS WITH PROJECTION TO 1980

	1964	1980	PER CENT
	<u>(thousands)</u>	<u>(thousands)</u>	INCREASE
State Parks State Forests State Game Lands State Fish Areas	25,000	53,446	114.0
	1,638	2,187	33.0
	1,422	2,347	43.0
	1,299	1,663	28.0
TOTAL	29,349	59,643	103.0

The plan then analyzes the existing supply and the factors involved in increasing the supply. It examines two significant factors: one, the function (or purpose) of existing outdoor recreational land and, two, its location. The bulk of State-owned land is forest land or game land, types of land suited to conservation purposes but not developed for intensive outdoor recreation. Out of 3,056,181 acres only 6% or 170,000 acres are in State parks, the form most appropriate in meeting people's recreation needs. Further, 81% of the State lands are located in the central regions, where only 13% of the people live, while about 3% is all that may be found in the Philadelphia and Pittsburgh metropolitan regions where 57% of the population is found.

To meet the standards noted earlier, 545,926 more acres will be needed by 1980, an increase of 151% in acreage. Since the population will increase by only 20%, this shows the difficulty in making up past deficiencies while trying to provide for future growth. The present Action Program at the local level calls for the addition of 163,541 acres, valued at \$110,934,000, based on PROJECT 70 Statements of Interest. The State Park Action Program calls for 53 new parks totaling 148,726 acres, at an estimated cost of \$57,997,000. These programs will almost meet the total Statewide deficiency but because of location problems, several severe regional deficiencies will remain, as shown below:

#### LONG-TERM REGIONAL PARK DEFICIENCIES

REGION	LOCAL	STATE
1	36,000 Acres	97,315 Acres
6	3,000 Acres	19,460 Acres
12	19,000 Acres	6,592 Acres

The Fish and Game Commissions plan to add respectively, 9,972 acres and 24,512 acres, which will aid in meeting the needs of the State. The total Action Program calls for adding the following land at a cost of approximately \$175 million.

164,000 acres in local county and municipal parks
149,000 acres in 53 new State Parks
24,000 acres in 19 new Game Lands
10,000 acres (land plus water) for 27 additional
fishing access sites

In addition to the above Action Program, the 62,000 acre Delaware Water Gap National Recreation Area (Tocks Island) will serve many Pennsylvanians as well as many other visitors from the Atlantic States. Additional Federal projects, largely United States Army Corps of Engineers projects and Department of Agriculture, Soil Conservation projects can strengthen the outdoor recreation resources.

The plan notes the State's needs for better utilization and development of existing State land held in forest reserves, for ameliorating past coal mine damage, for better vacation home development, for preservation of the fast disappearing access to the State's rivers and lakes, for improved land use controls around the parks and along our highways and for conserving prime farm lands as an essential open space resource.

The plan, as presented on Map 14 advances a significant first attempt to establish open space and recreation policy goals, suggesting seven types of policy and where these might best be utilized in the State. These policy types, described in greater detail in the plan, are identified as:

Intensive Urban Parks Acquisition
Extensive Urban Parks Acquisition
Prime Farmland Preservation
River Valley and Lake Front Preservation
State and Federal Vacationland Development
Coal Mine and Acid Stream Reclamation
Private Vacationland Development Control

Finally, the plan calls for better site development planning and a resolution of the question of which level of government should handle the various types of outdoor recreation. More research is needed on standards, on joint use proposals, on the potential contribution of the private sector, on use of easements and on the role of historic restoration. Most important, the plan calls for the integration of any Outdoor Recreation Plan into the larger context of a fully Comprehensive State Development Plan which views all aspects of the development of Pennsylvania and provides a framework for dealing with its problems and opportunities with leadership and effectiveness.

#### OBJECTIVES OF THE PLAN

- 1. Evaluation of current deficiencies of open space and outdoor recreation facilities at Statewide, regional and local government levels.
- 2. Formulation of immediate and longer-range priorities and policy goals for open space and outdoor recreation development and natural resources conservation, both for the State as a whole, and for each of its regions.
- 3. Identification of those lands and facilities most likely to meet these needs and policy goals.
- 4. Participation and program coordination of each department and level of government active in the recreation and open space field.
- 5. Integration of Pennsylvania's outdoor recreation and open space planning into the wider perspective of a National Plan and full utilization of the benefits to be derived from the Land and Water Conservation Fund.
- 6. Continuation of a collaborative program of research and analysis designed to maintain Statewide open space and outdoor recreation planning on a constantly up-to-date and comprehensive basis.

#### BACKGROUND FOR PLANNING

Pennsylvania's 45,000 square miles of land area contain a vast contrast in land forms extending from the fertile limestone farmlands in the southeast Piedmont, to the narrow strip of Great Lakes lowlands along Lake Erie, 200 miles distant in the northwest. Between lie the extensive Appalachian Mountain system with its central ridge and valley section, northern high plateaus and Pocono and Allegheny vacation lands to the east and west. The Ohio, Susquehanna and Delaware Rivers, together with their major tributaries, contribute 1,800 miles of primary streams to the State's potential recreation resources.

Pennsylvania's estimated 1964 population of 11,459,000 ranks the State as the third most populous in the nation. However, it is the distribution of this population within the State, not its quantitative total which most affects a Statewide open space and recreation plan. Nine of these eleven millions are concentrated along the State's western and southeastern borders. The  $5\frac{1}{2}$  million Pennsylvanians living in the 15 southeastern counties are a part of Megalopolis, a regional city stretching from Boston to Washington, D.C. At the other end of the State,  $3\frac{1}{2}$  million people in 15 western counties form the central and southern extensions of an even vaster, but less well defined urban complex stretching in triangular dimensions from Montreal on the St. Lawrence to Milwaukee on the Great Lakes and Pittsburgh at the confluence of the Allegheny and the Monongahela.

Separating these two large urban areas, the Appalachian Mountain system extends a thousand miles or more from northern New England to the State of Alabama.

From the Poconos north, through the Catskills, Berkshires,
Adirondacks, and the Green and White Mountains of Vermont and New Hampshire,
the Appalachian range is changing its function from that of an infertile
rocky farmland of an earlier generation to the vacation lands of today,
serving as a vast regional park for its great adjoining regional city,
Megalopolis. The central portion of Pennsylvania could likewise be the
vacation land not only for Megalopolis to the east, but also for the
emerging Great Lakes Urban Region to the west.

While such a prospect must rank as one of the most hopeful potentials in Pennsylvania's future State Development Plan, population differences between Appalachian and Megalopolis regions within the State pose problems. Today the population of Pennsylvania is almost evenly balanced between the 52 counties included in the Appalachia Development Program and the remaining 15 southeastern Megalopolis counties. During the 1930's, 47% of the State's total growth occurred within the latter section. This proportion rose to 74% in the 1940's and to 92% during the 1950's. Current intercensal estimates for 1964 indicate that Pennsylvania's modest population gain of 140,000 people since 1960 derives from a growth of 223,000 within the 15-county Megalopolis section, partially counterbalanced by an 83,000 loss in the 52-county Appalachian remainder of the State.

Pennsylvania's open space and recreation history may be said to have begun with William Penn in the year 1681. Penn, in his Charter of Rights to the Colonists, stated: "That in clearing the ground care be taken to leave one acre of trees for every five acres cleared, especially to preserve oak and mulberries for silk and shipping."

Two hundred and eighty-four years later Pennsylvania can boast that, with almost one-sixth of its total land area in public parks, forests and game lands\*, it has kept faith with Penn's original open space standard—a standard matched by only one other state among the continental 48. Today we must reassess the value of nearly four million acres of State and Federal woodlands in relation to an urban population whose open space and recreation needs were unforeseen and inconceivable in 1681.

Over the last century the Commonwealth has gradually accepted an ever-widening responsibility for natural resource conservation, but responsibility for outdoor recreation in Pennsylvania is allocated on a broad and general basis rather than by specific assignment. In most situations, the responsibility is shared by different governments.

In 1873 Governor John F. Hartranft asked for legislation "to arrest the wanton and indiscriminate destruction of the forests of the State," and in 1895 a Division of Forestry was created in the Department of Agriculture. In this latter year the Pennsylvania Game Commission was established, and, somewhat earlier, the first Pennsylvania Fish Commissioner was appointed. It was at about this same time, in 1893, that the first State Park was acquired at Valley Forge. Somewhat later, in 1913, the Pennsylvania Historical Commission was established, whose first public acquisition, in 1919, was "Old Economy" Village in Beaver County.

The Department of Forests and Waters, established as a Department in 1923, brought scientific management to the State Forests. Its sustained-yield program produced 62 million board feet of lumber sales

<sup>\*</sup>Public Land in Pennsylvania, Pennsylvania State Planning Board, January 1964.

in 1964 and 120 million board feet of annual growth on 2 million acres of State Forest land, whose productive capacity has been painstakingly restored from the cut-over state in which they were abandoned 70 years ago. The number of State Parks, which had gradually increased to 19 by 1933, doubled to 38 by 1942 and doubled again by 1964, when 25 million people visited the 74 State Parks covering 171,000 acres of State parklands.

Starting with its first acquisition in Elk County in 1920, the Pennsylvania Game Commission now operates 231 State Gamelands, covering one million acres throughout all but two of the State's 67 counties. In addition, the Commission supervises another one and a third million acres in private ownership under the Farm-Game Cooperative Program. No other state in the nation has provided so large a public hunting area nor surpassed the quality of wildlife management practices provided for the recreational enjoyment of Pennsylvania's million licensed hunters.

Beginning even earlier, in the late 1800's, the Board of Fish Commissioners (reorganized as the Pennsylvania Fish Commission in 1949) established the first of today's eight fish hatcheries. These hatcheries produce annually 19 million fish of 24 species to serve nearly 600,000 Pennsylvania fishermen at the 130 access areas, covering 20,000 acres of land and waters, owned or controlled by the Commission.

At the local level outdoor recreation programs may be found as a supplement to the parks or sites and as clearly identified activities of government. Ranging from the City of Philadelphia's well-staffed and professionally directed Recreation Department down to a township's unpaid Recreation Commission, all forms of local government accept some degree of responsibility for providing outdoor recreation activity programs for its citizens as well as park sites. At the county level, the progressive

counties have created Park and Recreation Boards, concerned both with acquiring parkland and with providing a range of activity programs.

Although there is an apparent natural selection process at work that leaves large, extensive sites to the State or county while the cities and townships focus on intensive sites and on activity programs, this has never been agreed to as a public policy. In fact, despite this general pattern, there are sufficient examples of confusion or duplication to warrant an attempt to develop a better and more widely accepted system of responsibility allocation than the present.

The Commonwealth can rightly feel a sense of accomplishment in the fact that total State, Federal and local public lands can today supply as much as 400 acres for every 1,000 people of this heavily populated industrial State, compared with only a 300-acre average for the nation. The State's own 270-acre per 1,000 people share of this total already exceeds the National Recreation Association's recommended year 2000 target for all other states.

Unfortunately, these abstract aggregates conceal some very acute outdoor recreational problems. Pennsylvania is experiencing a shortage of open space, not as a matter of over-all supply, but rather as a question of the right kind of open space located in the right areas.

Ninety-four per cent of these  $3\frac{1}{2}$  million acres consist of Forest and Gamelands—a form not designed for the high-intensity, multiple-use recreational needs of our largely urban population. The National Recreation Association recommends a year 2000 target of 65 acres of State park—land, plus an additional 25 acres of local urban and metropolitan parks for every 1,000 people, possibly an idealistic goal. What cannot easily be dismissed is that Pennsylvania's current ratio of 15 acres of State

parklands and approximately 5 acres of local county and municipal parklands falls far short of current comparable national averages of 32 acres per 1,000 people for State and 15 acres per 1,000 people for local parklands.

The problem is that 81 per cent of the State lands are located in the central regions of the State, where only 13 per cent of the people live, while only 3 per cent of the land is located in the expanding Philadelphia and Pittsburgh metropolitan regions where 57 per cent of the State's population reside. The Commonwealth's parkland acreage must be brought up to standard on a Statewide basis, and be located reasonably near each region of the State. The current target is to provide a State Park within 25 miles of every Pennsylvanian and 25 acres of State Parkland for every thousand people, together with assisting local governments to reach a standard of 15 acres of local parks per thousand inhabitants.

#### TOWARDS A SOLUTION

With the passage of the Land and Water Conservation Fund Act, the State increased its efforts to improve the amount and distribution of outdoor recreation land.

The State Planning Board, a staff agency in the Governor's Office, has the mandated responsibility for preparing plans for the physical and economic development of the Commonwealth, for the conservation of its natural resources, and for the orderly programming of its capital improvements (the State Planning Code, Act No. 485, P.L. 1608, as amended). In confirmation of the State Planning Board's planning responsibility, the Attorney General's office advised on September 30, 1964, that "the State Planning Board is the agency having Statewide responsibility for planning, including the coordination of open space planning by all State departments..."

Governor William Scranton has designated the Executive Director of the State Planning Board, as Liaison Officer, for the Commonwealth in utilizing the Land and Water Conservation Fund Act.

In light of the foregoing, it was agreed that the State Planning Board would undertake to prepare the Outdoor Recreation Plan, utilizing the resources of all involved State agencies to the fullest. Accordingly, the State Planning Board and the Department of Forests and Waters have both been represented at all meetings sponsored by the Bureau of Outdoor Recreation. Close liaison has been maintained by the Board's staff to insure

that the plan is truly representative of the Commonwealth as a whole.

Any plan or program for an activity so basic as outdoor recreation must have support and understanding from the people. As a primary measure of citizen support, the record of PROJECT 70, Pennsylvania's recent 70 million dollar open space bond issue, deserves examination. Two consecutive General Assemblies passed the constitutional amendment necessary for a Statewide referendum. Once the legislative action was complete, it became possible to involve the general public in a sustained drive to support better outdoor recreation through a favorable vote on the bond issue. A dedicated group of citizens from all over the State was organized, an educational booklet was prepared and, most important, meeting after meeting was scheduled to involve the public directly in the plan. When the issue was placed before the voters, they responded by voting for the bond issue and later applying for almost three times as much money as was available.

When the Land and Water Conservation Fund Act made additional money available, experience gained through the drive to pass PROJECT 70 proved invaluable. Cooperation between the Department of Forests and Waters and the State Planning Board could hardly be improved. The Secretary of Forests and Waters, an ex officio member of the Board, is in close touch with the fifteen citizens who make up the State Planning Board. The Department had in existence a fine relationship with the private agencies with whom they had worked during the drive for PROJECT 70. The State Planning Board, already uniting a wide range of interests, was deeply familiar with plans and programs of all State departments through their hearings on the six-year Capital Program. With concurrence at the top, the staff of the agencies involved found it easy to meet and to

identify problems, to assign responsibilities and to agree on proposals.

These meetings make this plan truly a cooperative effort.

The most important source of data on existing supplies of local lands is the Bureau of Outdoor Recreation Survey, an inventory of outdoor recreation land, completed in 1964. In this survey local communities were asked to give a complete listing of their current public open space sites. Although the results represent only a sample of Pennsylvania's communities, it provides the only suitable inventory of existing local public open space. The BOR also supplied an inventory of all State owned outdoor recreation sites.

For the inventory of potential open space two sources of data were available. In addition to the BOR Survey, which also listed potential open space by community, there was the State's PROJECT 70. Under this program counties, townships, cities and boroughs were invited to submit open space proposals.

It is significant that PROJECT 70 proposals exceeded the BOR Survey potential by 98,000 acres. This is due in all probability to the inclusion of even the smallest borough and a better response from local officials since the program was actually under way. For these reasons it was assumed that PROJECT 70 data were a more complete gauge of potential and the best indicator of need. Since financing of those proposals would be on a matching basis, each community was required to submit cost estimates for land acquisition along with acreage requirements.

These data are assumed to present a realistic measure of local willingness and ability to pay for open space and as such can be regarded as at least a first phase local action program.

Using the foregoing sources of data on supply and potential, an

analysis of regional distribution was made and coupled with population growth, estimates of future demand were compiled. This analysis provides the basis for identifying the local portion of the State's open space strategy.

The long and extensive experience of the Commonwealth in the recreation field has been fully incorporated in the preparation of this plan. Each State agency was able to provide attendance data and identify potential resources. Tempered with the judgment and experience of their respective staffs, reasonable estimates of future supply and demand were made.

State open space was subjected to the same analysis as the local component, including a study of the regional distribution of existing supplies in relation to population plus estimates of future need based on population projections.\* Attendance projections were also made for each separate facility (State Park, Game Land, etc.). The results form the pragmatic basis for determining policy guidelines.

Measuring open space was done by regions to gain an understanding of regional differences and to establish a basis for future regional needs. The unit used for this study is the State Planning Region, initially established as part of the State's comprehensive planning program.

There are thirteen of these regions, each composed of several counties. They have been delineated on the basis of similarity of economic, physical and demographic characteristics or a combination of these and other factors which seemed relevant to a particular region. A regional reconnaissance has recently been completed which examined in detail each of these regions. The data and evaluation of these regional studies will

<sup>\*</sup>Population of Pennsylvania: Projections to 1980, Pennsylvania State Planning Board, June 1963.

complement the findings of this plan.

Using the inventory of existing and potential open space several measures were devised to determine supply and need. Supply was measured by the ratio of acres of open space per 1,000 people. By doing this for the several categories of recreation land use, an accurate picture of existing supply on a regional basis was developed. A corresponding measure of supply was developed for 1980 by calculating the same ratios but adding in the proposed increment of open space and the 1980 projected population.\*

The measurement of need was based on commonly accepted minimum acreage standards for specific types of open space. In the case of local open space a standard of 15 acres/1,000 persons was used and for State Parks, 25 acres/1,000. Using these data current and potential needs could be quantified and compared with existing supply on a regional basis.

By examining and analyzing the two sets of data a determination of existing and future deficit by regions could be made. As might be expected, there was considerable variation in the regional deficits, both in terms of quantity of acreage and types of open space.

In comparing regions of existing deficit with regions of future deficit, conclusions could be made as to the effectiveness and short-comings of our existing open space program, thus providing a basis for determining where future emphasis should be applied.

A measure of demand was attendance trends and projections at State recreation facilities. In the case of Forest, Fish and Game Land, where accurate attendance is difficult to enumerate, the trends and projections reflect the best judgment of the respective staffs compiling the data.

<sup>\*</sup>Population of Pennsylvania: Projections to 1980, Pennsylvania State Planning Board, June 1963.

In the case of State Parks which receive the greatest portion of visitations, a method of projecting future attendance was used. The purpose of this was to reflect the peculiar aspect of availability. A new park facility will often reach capacity without any apparent relationship to the attendance trends at other parks in the same area. This indicates a huge, latent reservoir of people who will flock to new parks when they are built. Regional attendance projections were made incorporating the design capacities of the proposed new parks.

# THE PRESENT AND FUTURE DEMAND FOR RECREATIONAL OPEN SPACE

Demand for outdoor recreation facilities is based on a variety of factors inherent to the user and to the facility. Age, occupation, education, income and many other characteristics greatly influence the type, location and quantity of outdoor recreation space that must be provided. The rate of participation in outdoor recreation is also increasing more rapidly than the rate of population growth of the State and of the nation. Additionally, the demand for parks is stimulated by the creation of new parks. In fact, creation of new parks in congested metropolitan areas often stimulates demand to the point where parks become more crowded after the new facilities are provided than before.

In the absence of a reliable technique for measuring demand, the following analysis examines the ratio of existing and proposed recreational open space to current and future population and compares this ratio to a standard.

Selecting such a standard is not an easy task. Experienced personnel in the recreation field vary widely in their estimates of minimum requirements. For local urban parks the most commonly recommended minimum acreage is 10 acres per 1,000 persons. Because of increased mobility and the sprawling nature of urban areas, some recommend an additional 10 to 15 acres per 1,000 of extra urban parks, making a total of 25 acres of recreation open space per 1,000 persons. This plan calls for a compromise figure of 15 acres per 1,000 persons

as a standard for locally owned parks.

The standards for State Parks are even less precise and vary between 25 and 65 acres per 1,000 depending on type of facility and activity provided. The National Park Service and a consultant for the National Recreation Association have recently recommended a 65 acre per 1,000 standard. In <a href="Land for the Future">Land for the Future</a> published by Resources for the Future, Inc., 30 acres per 1,000 is suggested as a minimum "where use per capita is comparatively high but acreage relatively highly developed." The National Recreation Association in its 1957 report, <a href="Public Recreation and Its Administration in Pennsylvania">Pennsylvania</a>, recommends a 25 acre per 1,000 standard in evaluating the long-range State Park needs.

Because of its applicability to Pennsylvania, this 25 acre minimum was accepted as a realistic and attainable goal for State Parks and is used as a standard in this study.

First, the ratio of total public open space in acres to 1,000 persons was computed for each State Planning Region. For the State as a whole, the three million acres of all State recreation lands provide a ratio of 270 acres per 1,000 persons. The regional variations, however, range from a minimum of eight acres per 1,000 persons in the five-county Philadelphia region to a maximum of over 5,000 acres per 1,000 persons in sparsely settled Region 9.

While there are 270 acres of State <u>land</u> per 1,000, there are only 15 acres of State <u>Parks</u> for each 1,000--just a little more than half the recommended 25 acres minimum. Despite an average of 15 acres of parks per 1,000 persons Statewide, there is considerable range on a regional basis.

Using the 1960 regional population and current park acreages, the ratio of State Park land per 1,000 persons was calculated for each re-

gion. Applying the 25 acre per 1,000 minimum, six of these 13 planning regions have inadequate State Park acreage to meet the needs of their residents. With 83% of the total population, they had only 31% of State Park acreage.

REGIONAL DISTRIBUTION OF POPULATION AND STATE PARK ACREAGE AND CURRENT DEFICITS

REGION	PER CENT OF TOTAL POPULATION	ACRES PER 1,000 PERSONS	ACREAGE DEFICIT
1	32.0	1.3	85,000
2	6.0	9 . 6	10,860
3	. 7	165.7	
4	1,3	114.7	
5	7.1	19.6	4,300
6	9.9	7.2	19,900
7	2.5	4.9	5,700
8	2.0	124.8	
9	1.0	26.3	Olive deser
10	1.5	61.5	
11	4.5	<b>4</b> 5 . 2	
12	25.5	4.5	59,100
13	<u> </u>	39.0	
STATE	100.0	15.1	112,049

On a State basis, the deficit is a substantial 112,000 acres, but when the regional shortages are totaled, it would require acquisition of 185,000 additional acres to meet the standard for each region.

Region 1, with 32% of the total population and only 3% of total park acreage, accounted for 45% of this deficit, while another 32% was accounted for by the 59,000 acre deficit in the Pittsburgh Region, No. 12. In Regions 2 and 6, which with Region 1 form Pennsylvania's portion of Megalopolis, the population pressures are increasing and the competition for land between open space and urban development is already causing some serious maladjustments even without considering park needs for the adjacent

Philadelphia metropolis.

Included under the heading of local parks are county, township, city and borough open space. The primary source of data on existing acreage is the BOR survey previously cited. In this survey, cities, counties and boroughs were asked to list their recreation areas. Out of the 67 Pennsylvania counties, only 16 were listed as having any county park acreage, while city or borough park acreage was recorded in only 24. Thirty-five counties have no local acreage recorded at all, so current supply refers to less than half the counties and even a smaller proportion of the boroughs. The following table shows the regional distribution of local parks in relation to population.

REGIONAL DISTRIBUTION OF POPULATION AND LOCAL PARK ACREAGE AND CURRENT DEFICIT

REGION	PER CENT OF TOTAL POPULATION	ACRES PER 1,000 PERSONS	ACREAGE DEFICIT
1	32.0	4.9	36,200
2	6.0	6.5	6,000
3	.7		1,200
4	1.3	1.9	1,900
5	7.1	.8	11,500
6	9,9	2.2	14,300
7	2 . 5		4,200
8	2.0	2.4	2,800
9	1.0		1,700
10	1,5	<del>-</del>	2,500
11	4.5	1.2	7,000
12	25.5	4 。 9	29,000
13	6.0	3.0	8,200
STATE	100.0	3.8	126,600

Of the total inventory of slightly more than 43,000 acres, 75% was located in the two metropolitan regions of Philadelphia and Pittsburgh (Regions 1 and 12), both of which had 4.9 acres per 1,000, only a third of the standard.

All of the regions had a deficiency of local open space based on the standard of 15 acres per 1,000 persons. The Statewide deficit totals 127,000 acres, over half of which is in the metropolitan Regions 1 and 12. For Region 1 to provide the minimum recommended acreage would require 36,000 more acres and in the Pittsburgh Region 29,000 acres, over twice the existing local park acreage in these two regions.

Using data furnished by the Department of Forests and Waters, and the Game and Fish Commissions, attendance trends and projections were compiled for four categories of State recreation lands.

#### VISITORS TO STATE RECREATION AREAS

	1964 (thousands)	1980 (thousands)	Per Cent Increase
State Parks	25,000	53,446	114.0
State Forests	1,638	2,187	33.0
State Game Lands	1,422	2,347	43.0
State Fish Areas	1,299	1,663	28.0
TOTAL	29,349	59,643	103.0

In the eleven year period between 1953 and 1964 the number of visitors to State parks almost doubled and current estimates see another doubling by 1980, when State parks will be visited by 53 million people. Stated in another way, each acre of park land in 1964 had 144 visitors. At the other extreme, vast areas of State Forest received only one and two-third million visitors, or a ratio of less than one visit per acre.

The type of facility as well as its location seems to have a great influence on use. The heavy usage of parks in Region l occurs mainly at the historical parks such as Valley Forge and Washington Crossing—parks which undoubtedly attract large numbers of tourists

from other states as well. Presque Isle and Pymatuning together account for the major portion of the six million visitors to parks in Region 13. These too are parks of more than local significance.

Whether open space needs can keep pace with population growth depends on the planning done now in anticipation of future population growth. Once a region's land has been pre-empted for urban uses, and the cost of acquisition has mushroomed, there is little chance of adequately meeting the demand.

To determine where and how much land will be needed in the future must be predicated on a study of population. Based on Pennsylvania State Planning Board estimates,\* Pennsylvania's 1980 population is expected to increase by over 2,000,000, and 97% of this growth will occur in those regions which have a current deficit of State Parks. The Philadelphia area alone will increase by 60%, while its rapidly urbanizing neighbors (Regions 6 and 2) will increase by 25%. This southeastern area of Pennsylvania, which had 62% of the deficit in State Parks, will receive 85% of the population increase. Current proposals will not be able to meet this expected increase in demand.

<sup>\*</sup>Population of Pennsylvania: Projections to 1980, Pennsylvania State Planning Board, June 1963.

#### THE SUPPLY OF RECREATIONAL OPEN SPACE

The Bureau of Outdoor Recreation survey reported a total of 3,606,853 acres of recreation land in public ownership including Federal, State and local as follows:

Federal		507,523
State		
Forests .	1,863,873	
Game	1,010,968	
Parks	170,801	
- Fish	10,539	
		3,056,181
Local		43,149
		3,606,853

In a series of recent articles in the magazine, Recreation, it was reported that 15.44% of the total State area was in State lands — 14.85% in forest and other areas and the remaining .59% in parks. This ranked the State second in per cent of State—owned open space areas and eighth in per cent of total area in parks. Concluding that each State should reserve at least 5% of its land area for recreation and open space, it would appear that Pennsylvania is adequately supplied with State owned land. However, as has been pointed out in the section on "Demand", factors other than gross acreage have a greater bearing on the usefulness of this open space. Two of the principal ones are (1) type of

open space, (2) location.

As can be seen from the foregoing table, the great bulk of State acreage is in forest and game lands—types of land use whose function is conservation or timber production rather than intensive recreation use and development. Out of the 3,056,181 acres only 6%, or a little less than 171,000 acres, was in State parks which supply by far the greatest number of people with recreation. In 1964 State Parks received 90% (25 million) of all the visitors to State recreation areas. The great bulk of State acreage is in Forest and Game Lands which do not have the facilities for more intensive use, nor the authority to provide such facilities.

The fact that 78% of the population lives in 12 Standard Metropolitan Statistical Areas means that emphasis must be given to these areas if the needed community and State recreation opportunities are to be provided for the large percentage of population. Further concentration of urban population is seen in the fact that 58% is found in 12 urbanized areas (i.e., cities of 50,000 or more and their urban fringe). In this respect recreation open space in Pennsylvania is far from satisfactory.

The Federal Government has jurisdiction over 507,523 acres of recreation lands including parks, forests, reservoirs and fish and game propagation areas. Ninety-three per cent of the Federal acreage is in the 471,077 acre Allegheny National Forest centered in Warren, McKean, Forest and Elk Counties.

The Corps of Engineers administers more than 20,000 acres in thirteen Federal reservoir projects. Seven of these are in the western part of the State on the Ohio and its tributaries, three on the Susquehanna and three on the Delaware, in the eastern half of the State.

The Bureau of Sports Fisheries and Wildlife administers the 1,559

acre Erie Wildlife Refuge located in Crawford County. Most of the remaining Federal acreage is in the four historic parks of the National Park Service. Gettysburg National Battlefield, with 3,000 acres, is the largest.

The Corps of Engineers has a number of reservoirs under construction or proposed throughout the State. The largest of these already authorized, will be the 12,000 acre Tocks Island Reservoir on the Delaware River. The Delaware Water Gap National Recreation Area has been authorized; this reservoir will form the nucleus for a 62,000 acre park which it is estimated will attract 10 million visitors a year.

Allegheny Reservoir, located on the Allegheny River at Kinzua in Warren County is already nearing completion and will provide a base for water oriented recreation within the Allegheny National Forest. The large Raystown Reservoir, proposed along the Juniata River in Huntingdon County, is now being considered as a possible National Recreation Area similar to Delaware Water Gap National Recreation Area. There are 25 other reservoirs under construction or proposed by the Corps of Engineers, most of which are potential recreation areas.

The Department of Forests and Waters through the Division of Forests administers 15 State Forests with a total acreage of 1,863,873 acres. Within the State Forests there are a number of picnic areas and other facilities to serve the needs of the outdoor enthusiast. Public hunting is permitted in most State Forests. Nevertheless, State Forest acreage is generally located in the central and mountainous parts of the State and its primary function is one of conservation. It therefore does not provide the large urban populations with an immediate solution to their outdoor recreation needs, although improved access and development would help remedy this situation.

The Division of State Parks administers 74 State Parks and 18 other areas of natural or historic value. These 74 parks, including historic and scenic natural areas comprise 170,801 acres. As with other State lands there is great disparity in the distribution of park acreage. The seven smallest regions in terms of population with only 14% of total population had 55% of the park acreage, and the Philadelphia region with almost a third of the State's population had less than 3% of the park acreage.

Next to the holdings of the Department of Forests and Waters, game lands comprise the largest category of State recreation lands with 226 separate units totaling 1,010,968 acres, primarily for game propagation and hunting. As with forests and parks, the great abundance of these lands is in rural areas. Because of the \$100 ceiling imposed by law on the purchase price of these lands, it is unlikely that any great acreage can be added in the urban areas. In some regions game lands provide the largest component of recreation acreage. Region 1, for example, without any forest lands, has 5,917 acres of game land - a larger area than there is in State Parks. Also in Regions 2 and 12, where there are little or no State Forests, there was considerable game land acreage.

The Fish Commission administers over 100 areas totaling 10,539 acres including lakes, streams and access areas.

Pennsylvania historic sites and buildings are owned and administered by the Pennsylvania Historical and Museum Commission. In 1949 the Joint State Government Commission, with the help of the Pennsylvania Historical and Museum Commission, compiled a catalog of the most significant historical buildings and sites. This catalog is

currently being expanded and brought up-to-date and it is this list of historical properties that has provided the basic source of information on supply. This list comprises 905 different areas in 61 counties and includes those already in public ownership as well as those in private hands. Thirty-eight of these are administered by State or Federal agencies and are open for the public's enjoyment. Many more administered by local historical organizations or private individuals are also open to the public.

Most of the historic buildings and sites are in or near the large urban areas, particularly Philadelphia, Pittsburgh and in the cities and countryside of Region 6. Yet it is also in these areas where the greatest danger from urbanization and urban renewal threatens the preservation of these historical monuments. Out of the total inventory not now in State or Federal care, thirty two have been identified by the Pennsylvania Historical and Museum Commission as worthy of priority in any acquisition or preservation program.

The principal source of data used in evaluating the supply of local open space was the Bureau of Outdoor Recreation Survey. Although far from complete, it does give some idea of how open space is distributed and perhaps even more important it points up the need for more detailed data on every unit of local government.

The survey included all cities of 50,000 or more but only a sample of cities and boroughs under 50,000. The result was a fairly complete survey of the larger urban areas where the need is greatest.

The greatest existing supply was found in the urban counties.

Regions 1 and 12, with 31,938 acres, accounted for 75% of the total

while several other urban areas accounted for most of the remainder.

This was also true in the distribution of the potential supply of 65,365 acres. The greatest portion was in those regions which have the greatest need both now and in the future.

The following table lists by region the results of this survey for both existing and potential areas.

EXISTING AND POTENTIAL LOCAL OPEN SPACE

Region	Existing	Potential
1	17,716	10,359
2	4,607	2,176
3	mad spino cospi	171
4	275	4,178
5	641	12,342
6	2,505	11,365
7	_ ~ _	3,166
8	543	550
9		
10	~~~	
11	615	2,311
12	14,222	11,652
13	2,055	6,598
STATE	43,149	65,365

Source: Bureau of Outdoor Recreation Survey

The role of private recreation cannot be overlooked in a Statewide recreation program. Although exact figures are not available, countless amusement parks, carnivals, golf courses and boat rentals provide many people with a form of recreation. The Bureau of Outdoor Recreation is now in the process of trying to measure the impact of the private sector in supplying the recreation but the data are not yet available.

One sector of the private vacation industry for which data

were available was the growth of vacation homes in the State. Using United States Census of Housing data, it was possible to map the growth and distribution of homes classified as "seasonal" or "occasional" in use. It was found that between 1950 and 1960 there was an increase of 80% in this portion of the housing stock, increasing from 47,248 in 1950 to 85,129 in 1960.

Between 1950 and 1960 the number of vacation homes in the three Pocono vacation counties of Monroe, Pike and Wayne increased by over 7,000 or 85%. Only four other counties in the State experienced increases of more than 1,000 vacation homes; all four (Crawford, Forest, Venango and Warren) serve as a vacation center for the urban areas of the Great Lakes.

Although no other county had so large an increase, several counties did have a relatively larger number of vacation homes. Luzerne, Erie and Bucks Counties each had over 2,000 vacation homes in 1960. Numbers alone do not reveal the true nature of the vacation home industry. In some counties the vast majority may be relatively primitive hunting or fishing cabins used only a few days a year, while in other counties, such as the Poconos, the houses may be constructed in subdivisions with all the comforts of home—and in fact may be used as home for much of the year.

The Regional Reconnaissance Surveys, conducted by the State Planning Board, have already noted a trend toward recreation subdivisions in several counties. In southern York County a large 1,500 unit recreation subdivision is under way and similar ones are found in Adams County.

These cater primarily to the large urban markets of Washington and Baltimore, just as the Pocono developments cater to Philadelphia and New York markets.

#### PENNSYLVANIA'S NEEDS FOR RECREATIONAL OPEN SPACE

The Bureau of Outdoor Recreation inventory of existing public open space records no more than 43,000 acres of local parks when, at standards of 15 acres per thousand people, a total of 170,000 acres should be available now to serve the 1960 population and 204,000 acres for the anticipated 1980 population. It is noteworthy that this current deficit in local parks obtains in every State Planning Region within the State and that none now enjoys more than 40% of current requirements.

Moreover, open space standards cannot be met simply on the basis of Statewide averages but must be measured region by region within reasonable driving distances of the people they are to serve. Calculated on such a regional basis, the proposed local acquisitions under PROJECT 70 will still fall short of providing minimum standards by approximately 52,000 acres—most of this deficit falling within the following three regions:

#### LONG-TERM REGIONAL SHORTAGE OF LOCAL PARKLANDS

Region	1980 Deficit	Remaining Per Cent Deficiency
1	36,000 acres	50%
12	19,000 acres	19%
6	3,000 acres	14%

The previous chapter on "Demand" also documented the current

Statewide shortage of 112,000 acres of State Parklands and noted the even larger 185,000 acre current regional deficit. The Action Program proposes the acquisition of an additional 149,000 acres of State Parklands—more than enough to meet current over—all State Park standards of 25 acres per thousand people, and almost enough (95%) to satisfy the requirements of the State's total anticipated 1980 population.

However, as with local parks, these proposals again fall seriously short of meeting 1980 requirements by regional distribution and it is noteworthy that it is the same three regions which accounted for the long-term regional shortage of local parklands which also make up 91% of Pennsylvania's long-term regional shortage of State Parklands. Less pessimistically, it should also be noted that this action program will reduce total regional deficits from 185,000 acres to 135,000 acres and improve regional standards in each of the deficit areas—dramatically in Region 12 (Pittsburgh) and moderately in Region 1 (Philadelphia) where the most serious problem will still confront the State.

#### CURRENT AND LONG-TERM REGIONAL SHORTAGE OF STATE PARKLANDS

	Current Deficit	Current Per Cent <u>Deficiency</u>	1980 Deficit	Remaining Per Cent <u>Deficiency</u>
Region 1	85,000 acres	95%	97,000 acres	80%
Region 12	59,000 acres	82%	7,000 acres	8%
Region 6	20,000 acres	71%	19,000 acres	51%

It would appear that there is no simple, quick or inexpensive answer to meeting minimum standards of local or State Parklands within these deficit regions. The proposed action programs already schedule 70% of State Parklands and 76% of local parklands expenditures for these

three regions. Serious regional deficits would still remain even if both State and local acquisition programs were devoted exclusively to these three areas.

In part, the current problems may be viewed as a heritage of the past; the inevitable result of inadequate local and State investment in public recreation lands and inappropriate locations for those State Parklands which were acquired. In part, the problem of making up these regional deficits is compounded by the relative costs of land acquisition. In Region 1, for which almost half of the acquisition funds are scheduled from both State and local programs, anticipated land costs are approximately six times as great as the average for the rest of the State. This same differential pertains to both State Park and local park acquisitions, with the difference that State costs tend to be only about half local costs.

#### ESTIMATED ACQUISITION COSTS

	State Parks	Local Parks
Region 1	\$1,360/acre	\$2,700/acre
Average, Other Regions	240/acre	400/acre
Average, Entire State	400/acre	700/acre

One response to such cost differentials is to devote the more expensive urban parks to the most intensive of recreational activities, and some measure of success in this regard can be reported for State Parks. In 1964, approximately 20 million visitors made use of 170,000 acres of Pennsylvania State Parks in the 62 counties of the State outside Region 1—an average attendance of 120 people per acre. In the five counties of Region 1, 5 million visitors sought some form of recreation on 5,000 acres—an average of 1,000 people per acre. Unfortunately, such density figures

may be a measure - not of high efficiency of land use, but instead of the over-use and abuse of public open space. Whatever the theoretical saturation point may be there is little doubt that once any park begins to exceed its design capacity, both the quality of the recreational experience and the physical condition of the park begin to deteriorate. Furthermore, while it may be necessary to devote a larger than normal proportion of high-cost parklands in Region 1 to the most intensive of recreational activities, the resulting deficit in provision of extensive, large-area activities should be made up in adjoining regions where land costs are lower but where sites are within reasonable travel distance.

#### THE ACTION PROGRAM

If Pennsylvania moves into an Action Program to provide 15 and 25 acres per 1,000 for local and State Parks respectively, there will be a need for 545,926 acres by 1980. This is  $2\frac{1}{2}$  times the current supply of 213,950. The fact that there will be a need for an increase of 151% in park acreage while population is increasing only 20% emphasizes the difficulty of having to provide recreation facilities for future population while at the same time making up for past deficits. Thus, even if an additional 312,287 acres is acquired by 1980 there will still be accumulated regional deficit of 183,164 acres.

There are no means of achieving these standards which do not necessitate a massive investment in the acquisition and development of additional public lands. The accompanying Action Program calls for adding:

164,000 acres in local county and municipal parks 149,000 acres in 53 new State Parks

24,000 acres in 19 new Game Lands

10,000 acres (land plus water) for 27 additional fishing access sites

The total cost of this program is estimated to be approximately \$175 million for acquisition only. The Commonwealth of Pennsylvania has already pledged itself to supplying \$70 million of this total—a pledge of support deriving from an act of the General Assembly, a referendum vote of the State's electors and the detailed site-by-site

applications of one department and three independent commissions of the State Government and 450 local governments, counties and municipalities under "PROJECT 70."

The proposed Action Program represents only a first step in what must become a continuing program of open space and outdoor recreation planning. The program presently in operation will meet or come very close to meeting the current parkland deficits in most, but not all, of the State's regions. For metropolitan Philadelphia and other areas in southeastern Pennsylvania where much of the current deficit exists and where the largest amount of future population growth is anticipated, the urgency of site acquisition will continue.

Fortunately the Commonwealth is already forging ahead with a vigorous program of open space acquisition both at the State and local levels of government. PROJECT 70 calls for an expenditure of \$70 million by 1970. In this program the State will spend \$50 million and the remaining \$20 million is available to local governments on a matching basis.

Under PROJECT 70 the four State agencies have identified 139,601 acres at an estimated cost of \$48,649,000 for inclusion in the State Action Program.

For the Local Action Program PROJECT 70 statements of interest were used. Each local unit of government was given the opportunity to submit proposals for open space acquisition and 450 responded. Forty counties, 199 boroughs, 173 townships and 38 cities proposed the purchase of 163,541 acres at an estimated cost of \$110,934,000. This approach reflects the willingness and ability of local government to finance its proposals because every dollar represents a specific project which has been detailed as to acreage, cost and usage and which is on file with the Pennsylvania State Planning Board.

The following table is a summary of the State and Local Action Program by Regions.

#### ACTION PROGRAM

	Stat	te	Local			
		Cost Estimates		Cost Estimates		
Region	Acres	(thousands)	Acres	(thousands)		
		<b>.</b>	70.000	h =0 0.40		
1	20,386	\$ 27,933	19,390	\$ 52,240		
2	11,329	5,167	15,522	5,957		
3	100	26	287	191		
4	2,400	407	2,093	304		
5	15,707	3,350	18,105	6,119		
6	16,643	6,465	17,288	8,590		
7	2,300	1,223	4,056	715		
8	11,936	3,033	4,860	1,610		
9	750	370	1,710	131		
10	100	2,717	512	103		
11	15,308	1,310	6,550	1,054		
12	65,96l	9,127	25,113	23,683		
13	20,110	3,813	48,055	9,937		
STATE	183,030	\$ 64,941	163,541	\$110,934		

Over the next 15 years 53 park projects with a total of 148,726 acres and an estimated cost of \$57,997,000 are planned for development by the Division of State Parks. Thirty-nine of these are under PROJECT 70 and 14 under normal departmental acquisition procedures. This added acreage will give a total supply of 323,036 acres of State Parkland in 1980—about 19,000 acres short of the anticipated Statewide need.

Although this will reduce the current Statewide shortage from 38% deficient to only 6% deficient in 1980, five regions will still have a combined deficit of 131,164 acres. Region 1 with 97,315 acres, Region 6 with 19,460 acres and Region 12 with 7,000 acres will account for the great bulk of this. These last three regions are scheduled to get 70% of the total State park expenditure in the Action Program.

Also included in State action are the proposals of the Game and Fish Commissions. The State Game Commission has identified 19 projects totaling 24,512 acres with an estimated cost of \$4,278,000. Most of this is scheduled for acquisition under PROJECT 70. The State Fish Commission proposes the purchase of 9,972 acres for \$2,664,000 at 27 different locations.

The Pennsylvania Historical and Museum Commission has identified thirty-two historic properties which it feels should receive priority in any open space acquisition or preservation plan. Twelve of these have already been earmarked for purchase under PROJECT 70. The purpose of this priority list is to provide the basis for an orderly program of acquisition and should not preclude the State from taking prompt action in acquiring any historical sites threatened with destruction.

The Local Action Program calls for acquisition of 163,541 acres of open space by cities, counties, boroughs and townships at an estimated cost of \$110,934,000. On the Statewide basis this Action will more than meet the estimated local park needs. However, on the regional basis, and probably on an individual municipal basis, there will still be some critical shortages in 1980. The anticipated regional deficit in 1980 will be approximately 52,000 acres--most of it in the Philadelphia and Pittsburgh Regions.

A significant factor in these Action Programs will be the Land and Water Conservation Fund. It has been shown that acquisition alone will require millions of dollars expended over a number of years. The priority is sound—acquire the land before it is lost for recreational use. But once acquired, there are planning costs, design costs and the important costs of Development. Pennsylvania will share the funds provided by this

Act with and among the local governments on a 50-50 basis, using experience gained through the grant program of PROJECT 70. These funds, while not so large as those already made available by the Commonwealth, can bring full usage of these lands that much sooner and can be used to add vital element of "quality" to their development.

#### FOLLOWING THROUGH

Pennsylvania's major problem is not so much an over-all shortage of public open space as it is a case of having the wrong kind of open space in the wrong areas. As a consequence, the Action Program has, of necessity, been oriented towards acquisition of additional land for more intensive use by nearby urban populations. The long-run problem, however, remains that of determining how to make greater recreational use of our abundance of existing public lands. The three million people who visited State Forests and Gamelands last year constituted only 10% of nearly 30 million people who visited all State lands, while the forest and gamelands made up 95% of the State's public open space. No doubt the greatest potential for more extensive use of these lands will occur where large scale Corps of Engineers, reservoir construction offers the possibility of water-oriented recreation, but the less dramatic examination of multiple-use development possibilities for State Forests and Gamelands can continue to relieve some of the pressure for new parkland acquisition.

Additional special problems exist above and beyond the acquisition and development of more land:

1. In the extensive hard and soft coal sections of the State the full recreational development of streams and adjoining lands is often inhibited by past mining activity. Although recently enacted

strip mining regulations offer reasonable assurance in regard to future mining operations, there remain many areas where acid stream reclamation and surface stabilization are a necessary prerequisite to recreational development.

2. One of the fastest growing sectors of the private recreation industry is that of vacation homes. The traditional pattern of widely scattered small clusters of hunting cabins and family cottages is rapidly changing as income levels rise, highway access improves and large-scale developers apply subdivision-scale production techniques to meeting current demands.

The problem of maintaining the rural charm and scenic values which are the initial attraction drawing people to these private vacation—lands is compounded by the fact that the rural communities experiencing this form of development have had the least willingness to institute land use controls. Too often, they do not appreciate that, although the addition of seasonal homes to the local tax base can offer very substantial tax relief without an immediate demand for community services, in the long-term these advantages disappear as seasonal homes become retirement homes or unplanned suburbs. Inadequate standards for seasonal homes inevitably lead to intolerable permanent communities.

3. One of the greatest recreational losses to the eastern seaboard states has been the disappearance of public access to the seashore.

While this problem does not fall within Pennsylvania's direct responsibility (except for a few miles of lake front along Lake Erie) a somewhat comparable example exists in relation to the State's rivers and public access to their banks. Plans for the development and allocation of scarce water reserves could well include conservation of scarce stream bank resources on a basin-wide scale.

- 4. The State's prime farmlands are an almost equally scarce economic and scenic asset and, located largely in the rapidly growing Megalopolis section of the State, they are under intense pressure from urban land uses. The problem is less that of absolute preservation an economic impossibility than that of ensuring that the conversion from agriculture to suburban land use minimizes wasteful or premature abandonment of land while maintaining as much of the land's attractive—ness as possible.
- 5. The problems of billboard, auto junkyard and mobile home development control are too familiar to merit more than passing mention. Last year Pennsylvania enacted the minimum legislation for billboard control along Federal Interstate highways required to make the State eligible for the additional  $1\frac{1}{2}\%$  Federal matching funds. So far, no legislative action has been taken on a bill (The Local Government Interchange Protection Act) which would require local government or State zoning protection within a one to three-mile radius of the nearly 400 interchanges planned for the Federal Interstate and Defense Highway System.
- 6. A somewhat similar problem confronts the State in seeking to protect the value of its public investment in State Parks. Too often, the most attractive and reasonably priced potential park sites are located in communities which lack subdivision and zoning controls. As a result, the surrounding unplanned commercial development subtracts from the pleasure of the new recreational facility. The State Planning Board is involved in a new collaborative approach to integrated development planning for both the recreation facility and the private development around the Delaware Water Gap National Recreation Area. Comparable

cooperation between local planning commissions and State Park planners should be required.

7. Finally, there is a great deal more that could be achieved in regional open space and recreation coordination. As yet few policy guidelines exist to define the range of recreational facilities for which each level of government is most appropriately responsible. Little experimentation has yet been undertaken in the matter of local government compacts for multiple-community use of recreation facilities on a regional basis. The selection of potential recreational sites should be assessed against competing claims for alternative land uses, and the park sites finally developed, coordinated in total regional development plans with such closely related programs as highway improvements.

In the accompanying "Tentative Open Space and Recreation Policy Goals" map there is an attempt to place certain of these problems into a Statewide perspective. (See Map 14)

- l. There are two broad urban regions in the southeastern and western sections of Pennsylvania where acquisitions might logically concentrate on providing the most intensive type of recreational facility. Here much of the ultimate solution to current deficiencies will depend upon local action in both the acquisition of additional metropolitan or municipal parks and the provision of more adequate neighborhood open space within the design of private residential subdivisions.
- 2. An identification of extensive recreation zones within or adjoining the above urban regions which possess greater than average scenic qualities at less than average urban land values. One of these, the South Mountain chain of relatively low hills, crosses the center of Pennsylvania's Megalopolis urban complex. Another, the Blue Mountain foothills and succeed-

ing ridges, adjoins this urban belt throughout its length to the north and west. A comparable example in the western section of the State is to be found in the Laurel and Chestnut Ridge Highlands near the Pittsburgh metropolitan area.

- 3. Scattered throughout the southeastern regions are much of Pennsylvania's most fertile soils and productive farms. To date little success has been achieved at the local government level in protecting these prime agricultural and scenic assets from competing urban land uses. Both the State and local governments share the responsibility for ensuring that these lands are not prematurely wasted. Whatever the best methods of achieving this goal may be whether in some form of agricultural zoning, tax assessment revision or development right acquisition rather than fee simple public purchase, the preservation of these prime farmlands forms an integral part of Pennsylvania's Statewide Open Space Plan.
- 4. A proposed action zone along both banks of the middle
  Susquehanna including portions of both the West and North Branches. Rapid
  growth of a large number of small and medium-sized communities throughout
  this valley may link up in a linear form of urban sprawl which could destroy
  the superior agricultural soils and scenic attractions of the valley and
  the outstanding recreational potential of the Susquehanna River. The
  possibility is currently being investigated of creating a series of wide,
  but relatively shallow recreational pools by use of deflatable rubber dams.
  Regions 6 and 7, within this zone, have the two highest proportional longrange deficiencies in State parklands outside the Philadelphia metropolitan
  area. The basin-wide development of this river recreation potential would
  both meet existing local needs and provide facilities within easy travel
  iistance from the even larger urban concentrations anticipated in the

future. The full development of this potential calls for close coordination between urban development planning and river oriented recreation planning.

The possibility exists that public open space acquisition in this zone might also serve the purpose of shaping the form of future urban communities.

Also included in this category are the lake-front lands along Lake Erie and river-front lands of the middle Delaware and upper Allegheny whose protection from encroaching urban development and accessibility for general public use are of major State concern. This concern does not necessarily imply extensive public acquisition, for vast areas of scenic potential along the lower Susquehanna have been kept from indiscriminate development through ownership by private utilities. What needs to be assured is that, under conditions of continuing shortages of public open space for surrounding urban populations, the fullest and wisest use be made of these nearby river and lake fronts, with recreational development guided by comprehensive region-wide or basin-wide plans.

5. Two zones on the eastern and western borders of the State encompass the Poconos and lands around Lake Pymatuning where private development of vacation homes has been proceeding at a very rapid pace without the guidance of any comprehensive area-wide plans. The principal State concern in these areas is the preservation of those scenic qualities upon which the continuation of this form of private recreation development is dependent, and the protection of State and Federal investment in Lake Pymatuning and the proposed Tocks Island Reservoir and National Recreation Area. The Pennsylvania State Planning Board (in collaboration with the State of New Jersey) has already contracted for a report to assess the quantity and type of private development likely to be induced by Tocks Island and will publish a regional sketch plan to guide the physical

location of these facilities in a manner most likely to harmonize with the surrounding region and national recreation area.

- eastern and western Pennsylvania where past mining activity has left a heritage of strip mining spoilation, culm banks, underground fires and acid mine drainage into surrounding streams. A selective program of surface and stream restoration would permit both improving the environment of local urban communities and establishing the prerequisites to large-scale recreation development within and outside these regions where this is presently precluded by acid stream pollution. Although much of the investment for accomplishing this task will derive from the Appalachia Program, this aspect of that program is an integral part of the over-all State Open Space and Recreation Plan.
- 7. Two very large zones extend across the northern and south central sections of the State which are too far removed from the large urban concentrations of the East Coast and Midwest for single day trip recreational use, but whose mountain and river scenic assets are ideally suited to large-scale multi-purpose Federal and State Programs for weekend and vacationland development. Current Federal Programs for the construction of Raystown and Kinzua Reservoirs are located in these zones and might be considered as prototypes of the additional projects which will emerge from comprehensive river basin plans for the Susquehanna and Ohio. Since much of the land of these zones is already in public ownership, priority should be given to the fuller recreational development of this existing public open space in conjunction with water resource development rather than to extensive additional acquisitions.

It must be emphasized that the purpose of this map is to identify

the type of policy goals with which a Statewide Open Space and Recreation Plan must be concerned, and to attempt so far as is possible at this time, to identify the general areas within which each policy might be most appropriate. The map itself is purely schematic. In reality each of these policies overlaps others and the recreational development of any region will be governed by the most appropriate combination of different policy objectives.

There is one other policy goal which must be a part of State open space and recreation planning but which cannot readily be described in terms of either location or deficiency ratings. From time to time special situations arise in which the State is presented with the opportunity to acquire for public use unique parcels of land. Sometimes these lands surround Federal or private reservoirs, sometimes they consist of private estates and sometimes they represent the careful and unpublicized assembly of scenic areas by private conservation groups. Often these special situations present the State with the necessity of taking immediate action or relinquishing for all time the possibility of public enjoyment of irreplaceable recreation resources. Unless the State's Open Space and Recreation Plan permits it to exercise these hard-to-predict options, something will be lost and the least of this loss may be the comparatively advantageous terms at which the State is now acquiring its parklands.

This report was designed to provide an overview of Statewide open space and recreation needs, a tentative identification of State and regional open space policy and specific Action Programs designed to provide relief where present needs and deficiencies are most acute.

The task of expanding and extending this "interim" plan towards a fully comprehensive product will require far more data than are now

available, more research, more planning and particularly, more coordination between all State agencies, levels of government, private organizations, and general public.

The following tasks have been identified as a partial list of those components which might logically form inputs for this next plan:

- given to State and local open space acquisition, and only preliminary consideration to the detailed facility development. Long-range development plans are needed for each new local and State Park, including type of activities to be served and anticipated visitor use. Perhaps the most important policy issue still unresolved in this regard is the question of what type of recreation activities and facilities are most appropriate to each level of government, State, county and municipal.
- 2. Such individual park plans cannot be based solely on the suitability of individual parcels of land for particular activities. They must also take into account some measure of local and regional demand for each recreational activity as balanced against the existing supply of facilities for that specific form of recreation. A great deal of additional data is needed before the existing supply of recreational activities can be properly evaluated at both State and local levels. Only fragmentary data and standards exist for measuring demand for specific activities or the distances from home that people will travel for such activities. Whatever research is undertaken on this subject should be coordinated with parallel research activities and the experience of other states, guided by the Bureau of Outdoor Recreation.
- 3. Another area in which current data are far from complete is the inventory of local open space and its use. While the Bureau of Outdoor

Recreation's recent survey is the most comprehensive source now available, its coverage was limited to counties and those cities of over 50,000 population plus a sampling of 22 smaller municipalities. Priority in the local action program should be given to those communities with the greatest current deficiencies. These deficiencies should be measured at the municipal and county level rather than regionally, but this requires a complete inventory covering every borough and township in the State.

- 4. Once these data are available it will become readily apparent that many of the State's cities, boroughs and townships which are most deficient in local parks also lack open land needed to remedy these shortages. In some instances county parks can substitute for municipal parks, but the potential friction which might arise as a result of the over-use of one municipality's parks by residents of adjoining communities is sizeable enough to merit examining the need for a State policy position. Another approach to the same problem might be that of encouraging some form of financial collaboration between adjoining municipalities in the acquisition and development of common local park facilities.
- 5. At the time this interim plan was being prepared, no State-wide inventory of private recreational facilities and open space was available and experiments were still in process at the Bureau of Outdoor Recreation for determining the most appropriate techniques for conducting such an inventory. Our present knowledge of vacation home development trends should be extended to include the whole of the private sector, with particular emphasis on the prospects and most likely locations for future development. A Statewide survey of the tourist industry currently being undertaken by the Pennsylvania Department of Commerce will provide some of the information now lacking on this subject.

- 6. Another area in which additional data are badly needed is the number, origin and destinations of out-of-State visitors using public and private recreation facilities in Pennsylvania. The Bureau of Outdoor Recreation has devised a uniform formula for collection of these data, and since a portion of the Federal Land and Water Conservation Fund matching grants will be based on the number of out-of-State visitors, there is some urgency in undertaking the appropriate research.
- 7. High priority should be given to the task of exploring the potential of existing public land for upgrading into more intensive multiple recreational use.
- 8. Wherever such increased use of existing open space or development of new acquisitions is dependent upon improved accessibility, such needs should be coordinated into Statewide and regional highway improvement plans.
- 9. Before any additional proposals are developed for future open space acquisition, a more comprehensive inventory of potential recreation sites should be undertaken in collaboration with local, county and regional planning commissions together with the Soil Conservation Service and private conservation organizations.
- 10. One aspect of open space acquisition that requires more attention and experimentation is the possibility of some method of control other than fee simple purchase—possibly development right acquisition or some form of easement.
- priate forms of development and tools for development control of lands adjoining State and Federal parks. Even the smallest State Parks are often degraded by unrestricted commercial development nearby. The largest of

Federal and State Reservoir Parks can generate whole new communities, the provision for which might, with some logic, be incorporated into the park plans themselves.

12. Each stage of this comprehensive plan preparation should be coordinated with and incorporated into major river basin plans and the wider scope of the State's own Comprehensive Development Plan together with revised population projections, the creation of regional and Statewide advisory committees and continuing coordination with the National Plan.

Elegano de La Maria de Caractería de Caracte

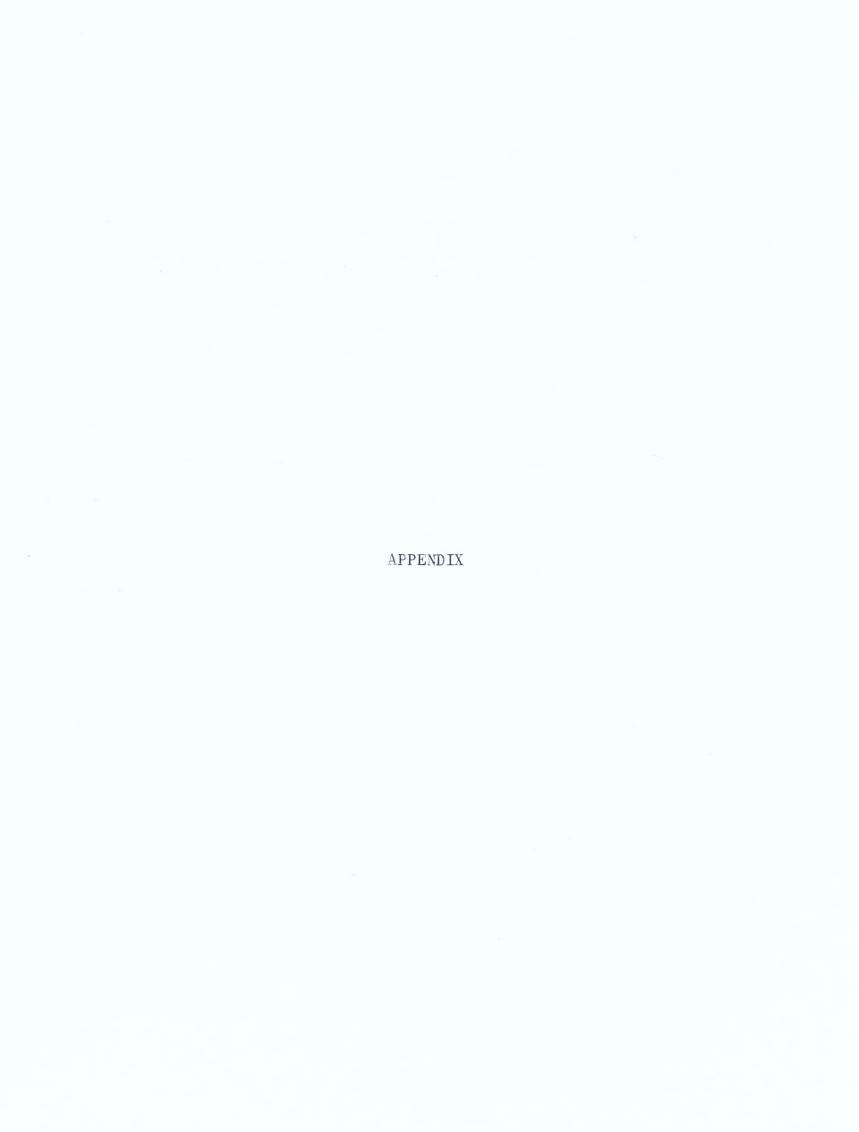




Table 1

NUMBER OF VISITORS TO STATE PARKS (Thousands)

			Visitors	New Park	s 1964-1970	New Park	s 1970–1980
E	xisting Pa	rks	per Acre	Capacity	1970	Capacity	1980
Region	1953	1964	1964	Added	Attendance	Added	Attendance
1	3,232	4,897	1,025	1,800	6,697	7,867	14,564
2	520	677	100		677	1,541	2,218
3	457	918	72		918		918
4	322	889	52		889	350	1,239
5	320	1,101	69	900	2,001	1,138	3,139
6	647	2,606	321	40	2,646	3,610	6,256
7	145	285	204		285	600	885
8	242	1,115	39	650	1,760		1,760
9	65	603	197	50	653		653
10	537	823	81	250	1,073		1,073
11	1,871	3,135	136	1,100	4,235	700	4,935
12	1,036	1,565	121	1,600	3,165	4,427	7,592
13	3,401	6,354	237		6,354	1,860	8,214
State	12,795	24,968	146	6,390	31,353	22,093	53,446

Source: Pennsylvania Department of Forests and Waters

EXISTING OPEN SPACE (Acres)

		State Land	s	•	Total			Total Open
Region	Parks	Forests	Game	Fish	State	Local	Federal	Space
1	4,774		5,917	82	10,906	17,716	23	28,843
2	6,740	%s <del></del>	18,503	34	25,514	4,607	848	30,969
3	12,759	72,280	69,861	2,552	157,452		2,883	160,335
4	16,945	189,427	159,503	2,803	368,678	275	556	369,509
5	15,860	20,924	68,598	325	105,707	641		106,348
6	8,116	149,465	83,676	409	241,767	2,505	3,807	248,079
7	1,395		37,050	163	38,611			38,611
8	28,148	751,075	104,551	221	884,075	543	196	884,814
9	3,053	478,270	119,933		601,256		239,904	841,160
10	10,190	9,271	59,107		78,568	Clair (agas		78,568
11	23,111	191,922	133,859	1,247	350,139	615	5,405	356,159
7 7	12,894	enggia coma	61,179	1,000	75,239	14,222	15,949	105,410
<b>2</b> 3	26,815	1,239	89,231	1,703	119,303	2,025	237,953	359,281
State	174,309	1,863,873	1,010,968	10,539	3,057,215	43,149	507,524	3,608,188

Source: Inventory of Outdoor Recreation Areas and Facilities 1964,
Bureau of Outdoor Recreation, Department of Interior

RATIO OF PUBLIC OPEN SPACE TO POPULATION (Acres per 1,000 persons)

Region	All State Lands (Including State Parks)	State Parks	Local Parks	State-Local Combined
1	3.1	(1.3)	4.9	8.0
2	36.2	(9.6)	6.5	42.7
3	2,044.8	(165.7)		2,044.8
4	2,0496.1	(114.7)	1.9	2,498.0
5	130.9	(19.6)	0.8	131.7
6	216.0	(7.2)	2.2	218.2
7	136.3	(4.9)		136.3
8	3,918.8	(124.8)	2.4	3,921.2
9	5,187.7	(26.3)	<b>-</b> -	5,187.7
10	474.2	(61.5)		474.2
11	685.6	(45.2)	1.2	686.8
12	26.1	(4.5)	4.9	31.0
13	174.3	(39.1)	3.0	177.3
State	270.1	(15.0)	3.8	273.9

Source: Bureau of Outdoor Recreation Open Space Survey, 1964

#### PENNSYLVANIA VACATION HOMES BY COUNTIES

1950 & 1960

<u>co</u>	UNTIES	1950	1960	INCREASE	COUNTIES	1950	1960	INCREASE
1.	Adams	431	708	277	35. Lackawanna	1,034	1,538	504
2 .	Allegheny	972	1,779	807	36. Lancaster	668	1,200	532
	Armstrong	391	923	532	37. Lawrence	177	374	197
4.	Beaver	345	564	219	38. Lebanon	676	887	211
5.	Bedford	594	1,154	560	39. Lehigh	470	683	213
6.	Berks	828	1,678	850	40. Luzerne	2,542	3,354	812
7.	Blair	447	617	170	41. Lycoming	1,030	1,397	367
8.	Bradford	640	913	273	42. McKean	373	794	421
9.	Bucks	1,663	2,090	427	43. Mercer	232	1,015	783
In,	Butler	862	1,737	875	44. Mifflin	267	531	264
11.	Cambria	261	586	325	45. Monroe	4,022	5,915	1,893
12.	Cameron	410	275	-135	46. Montgomery	602	1,101	499
13.	Carbon	468	827	359	47. Montour	51	85	34
14.	Centre '	3.54	989	635	48. Northampton	477	822	345
15.	Chester	355	494	139	49. Northumberla	and 267	523	256
16.	Clarion	274	872	<b>59</b> 8	50. Perry	347	369	22
17.	Clearfield	408	995	587	51. Philadelphia	a 977	1,595	618
18.	Clinton	494	449	-45	52. Pike	2,994	6,210	3,216
13.	Columbia	385	663	278	53. Potter	836	1,548	712
20.	Crawford	1,885	3,417	1,532	54. Schuylkill	434	859	425
21.	Cumberland	697	738	41	55. Snyder	176	299	123
650	Jauphin	489	930	441	56. Somerset	548	1,441	893
23.	Delaware	303	475	172	57. Sullivan	396	1,050	654
24	ük	269	1,057	788	58. Susquehanna	1,077	1,477	400
2 - 3	rie	1,319	2,254	935	59. Tioga	288	511	223
2 3	ayette	606	1,329	723	60. Union	288	389	101
2	forest	1,303	3,186	1,883	61. Venango	610	1,647	1,037
3.	Franklin	413	754	341	62. Warren	1,106	2,631	1,525
9.	Fulton	57	186	129	63. Washington	131	443	312
30.	Greene	54	235	181	64. Wayne	1,410	3,399	1,989
31.	Huntingdon	817	1,473	656	65. Westmoreland	1,410	1,957	547
32.	Indiana	203	544	341	66. Wyoming	1,114	1,599	485
33.	Jefferson	329	957	628	67. York	759	1,307	548
34.	Juniata	133	331	198				
					TOTAL	47,248	85,129	37,881

<sup>(1)</sup> Figures for 1950 include Seasonal and Nonresident housing units.

Fource: United States Census of Housing Table 26 (1950) and Table 28 (1960)

<sup>(2)</sup> Figures for 1960 include Seasonal and Occasional housing units.

### FEDERAL PARK AREAS

## EXISTING

Region	Map Number	Name
1	1	Independence National Historical Park
2	2	Hopewell Village National Historical Site
3	3 4	Prompton Reservoir General Edgar Jadwin Reservoir
4	5	Stillwater Reservoir
5	6	F. E. Walter Reservoir
6	7 8	Indian Rock Reservoir Gettysburg Battlefield National Park
8	9	Kettle Creek Reservoir
9	10	East Branch Clarion River Reservoir
11	11 12	Youghiogheny River Reservoir Allegheny Portage National Historical Site
12	13 14 15 16 17	Fort Necessity National Battlefield Loyalhanna Reservoir Conemaugh River Reservoir Mahoning Creek Reservoir Crooked Creek Reservoir
13	18	Tionesta Creek Reservoir
		PROPOSED (Major)
3	1	Tocks Island Reservoir
9	2	Allegheny River Reservoir
11	3	Raystown Reservoir

# EXISTING STATE PARKS

Region	Number	Name	Region	Number	Name
1	1 "	Brandywine Battlefield	8	36	Poe Valley
	2	Independence Mall	Ũ	. 37	Ravensburg
	3	Valley Forge		38	Susquehanna
	4	Fort Washington		39	Little Pine
	5	Washington Crossing		40	Hyner Run
	6	Ralph Stover		41	Kettle Creek
	7	Rocsevelt		42	Bucktail
	•	110000 4010		43	Black Moshannon
2	8	French Creek		43	Diack Positation
2	O	and them of con	- 	44	Sinnemahoning
3	9	Big Pocono	.9	45	Ole Bull
3	10	Tobyhanna		46	
	11	Gouldsboro			Lyman Run
	12	Promised Land		47	Denton Hill
				48	Sizerville
	13	George W. Childs		49 50	Bendigo
	14	Prompton		50	Elk State Park
4	15	Worlds End	10	51	Cook Forest
	16	Hills Creek		52	Clear Creek
	17	Leonard Harrison		53	Parker Dam
	18	Colton Point		54	S. B. Elliott
5	19	Archbald Pothole	11	55	Prince Gallitzin
	20	Ricketts Glen		56	Whipple Dam
	21	Bear Creek		57	Greenwood Furnace
	22	Hickory Run		58	Trough Creek
		•		59	Cowans Gap
5	23	Sam S. Lewis		60	Warriors Path
	24	Memorial Lake		61	Shawnee
	25	Gifford Pinchot		62	Blue Knob
	26	Pine Grove Furnace		63	Laurel Hill
	$\overline{27}$	Colonel Denning		64	Kooser
	28	Big Spring			
	29	Caledonia	12	65	Laurel Mountain
	30	Mont Alto		66	Linn Run
	31	Buchanan's Birthplace		67	Keystone
	<b>01</b>	December 5 Date of page 5		68	Crooked Creek
7	32	Shikellamy		69	Point State Park
f	33	R. B. Winter		70	Raccoon Creek
	34	Snyder-Middleswarth		10	Naccoon of cek
	35 35	Reed's Gap	13	71	McConnell's Mill
	30	necu s oap	10	72	Pymatuning
				73	9
				73 74	Chapman Presque Isle
				<i>i</i> 4	rieadne rare

## INVENTORY OF HISTORIC SITES AND MUSEUMS IN PENNSYLVANIA

### ADMINISTERED BY STATE OR FEDERAL AGENCIES

Region	Map Numbe	name Name
1	1 2 3 4 5 6 7 8 9 10	***Frandywine Battlefield, Delaware County Morton Homestead, Delaware County Governor Printz Park, Delaware County **Independence National Historical Park, Philadelphia Hope Lodge, Montgomery Graeme Park, Montgomery Pennsbury Manor, Bucks County ***Washington Crossing Park, Bucks County Valley Forge Park, Montgomery County Pottsgreve Mansion, Montgomery
2	11 12 13	*Hopewell Village, Berks-Chester Counties Daniel Boone Homestead, Berks County Conrad Weiser Park, Bucks County
6	14 15 16 17 18 19 20 21	Ephrata Cloister, Lancaster County Pennsylvania Farm Museum, Lancaster County Cornwall Furnace, Lebanon County William Penn Memorial Museum & Archives, Dauphin County *Gettysburg National Military Park, Adams County Thaddeus Stevens Blacksmith Shop, Franklin County Brown's Mill School Robert Fulton's Birthplace
7	22 23 24 25	Tuscarora Academy, Juniata County Fort Augusta, Northumberland County Joseph Priestley House, Northumberland Warrior Run Church, Northumberland County
8	26	28th Division Shrine, Centre County
9	27	Lumber Museum
11	28 29	Admiral Peary Park, Cambria County Capt. William Phillips Rangers Memorial, Bedford County
12	30 31 32 33 34 35	*Fort Necessity, Fayette County Searights Tollhouse, Fayette County Bushy Run Battlefield, Westmoreland County ****Fort Pitt Blockhouse, Allegheny County David Bradford House, Washington County Old Economy Village, Beaver County

Administered by-\*National Park Service

<sup>\*\*\*</sup>Brandywine Battlefield Commission

<sup>\*\*\*</sup>Pennsylvania Department of Forests and Waters; all others administered by Pennsylvania Historical and Museum Commission.

Region	Map Number	Name
13	36 37 38 39 40	Pithole City, Venango County Drake Well Memorial Park, Venango County Fort LeBoeuf Memorial, Erie County Flagship Niagara, Erie County Old Custom House, Erie County

## LOCAL PARK LAND NEEDS

# Current - 1964

	1960		Land Needs		D 0 ° °	New Parks
	Population	Supply	@ 15 Acres	Deficit	Deficiency	Added
Region	(Thousands)	(Acres)	Per 1,000	(Acres)	Ratio	(Acres)
1	3,591.6	17,716	53,874	36,158	68%	19,390
2	704.3	4,607	10,565	5,958	60%	15,522
3	77.0		1,155	1,155		287
4	147.7	275	2,216	1,941	78%	2,093
5	807.1	641	12,111	11,470	95%	18,105
6	1,119.4	2,505	16,791	14,286	85%	17,288
7	283.3	CHOICE distance	4,250	4,250	100 mm	4,056
8	225.6	543	3,384	2,841	84%	4,860
9	115.9	ONE ONE	1,739	1,739		1,710
10	165,7	des cap	2,486	2,486		512
11	510.7	615	7,661	7,046	92%	6,550
12	2,883.6	14,222	43,254	29,032	67%	25,133
13	684.6	2,025	10,269	8,224	73%	48,055
State	11,316.8	43,149	169,775	126,586	75%	163,561

# <u>Future - 1980</u>

	1980 Population	Supply	Land Needs @ 15 Acres	Deficit	Deficiency	Acres	/1,000
Region	(Thousands)	(Acres)	Per 1,000	(Acres)	Ratio	1964	<u> 1980</u>
_							
1	4,897.9	37,106	73,469	36,363	50%	4.9	7.6
2	$844 \cdot 2$	20,129	12,663		-	6.5	23.8
3	97.8	287	1,467	1,180	80%		2.9
4	162.3	2,368	2,435	87	3%	1.8	14.6
3.5	685.0	18,746	10,275	Special Plants		.8	27.4
	1,533.1	19,793	22,997	3,204	14%	2.4	12.9
	289.6	4,056	4,344	288	7%		14.0
3	268.4	5,403	4,026			2.4	20.2
Э	118.2	1,710	1,773	63	4%		14.5
10	144.7	512	2,171	1,659	76%	0.0	3.5
11	478.5	7,165	7,178	13		1.2	15.0
12	3,233.4	39,355	48,501	19,146	19%	4.9	12.2
13	843.8	50,180	12,657		400	3.0	59.5
State	13,596.9	206,810	203,956	52,000 <del>**</del>		3,8	15.2

<sup>\*</sup> As indicated by PROJECT 70 Preliminary Statements of Interest.

<sup>\*\*</sup> Cumulative regional deficit.

# STATE PARK LAND NEEDS

# <u>Current - 1964</u>

Region	1980 Population (Thousands)	Supply (Acres)	Land Needs @ 25 Acres Per 1,000	Deficit (Acres)	Deficiency Ratio	New Parks Added* (Acres)
1	3,591.6	4,774	89,800	85,026	95%	20,361
2	704.3	6,740	17,600	10,860	62%	8,879
3	77.0	12,759	1,925	PMO case	GIAD AMED	
4	147.7	16,945	3,700	740 Cm		2,250
5	807.4	15,860	20,175	4,315	21%	12,845
6	1,119,4	8,116	27,975	19,859	71%	10,748
7	283.3	1,395	7,075	5,068	80%	30
8	225.6	28,148	5,650		OFF man	10,000
9	115.9	3,053	2,900		GROW CARD	500
10	165.7	10,190	4,150	AMES AMES	-	100
11	510.7	23,111	12,775	FINANCE COLUMN	Maio Chia	10,204
12	2,883.6	12,894	72,000	59,106	82%	61,339
13	684.6	26,815	17,125		1000-1000	11,470
State	11,316.8	170,800	282,850	112,050 (184,846**)	38%	148,726

# <u>Future - 1980</u>

	1980 Population	Supply	Land Needs @ 25 Acres	Deficit	Deficiency	Acres	/1,000
Region	(Thousands)	(Acres)	Per 1,000	(Acres)	<u>Ratio</u>	1964	1980
بأسي	4,897.9	25,135	122,450	97,315	80%	1.3	5.2
2	844.2	15,619	21,100	5,481	26%	9.6	18.5
3	97.8	12,759	2,450	000 Om	678G-Cities	165.7	130.4
	162.3	19,195	4,050		films (page	114.7	118.2
r	685.0	28,705	17,125		PMD comp	19.6	41.9
ŝ	1,533.1	18,865	38,325	19,460	51%	7.2	12.3
	289.6	1,425	7,250	5,825	80%	4.9	4.9
3	268.4	38,148	6,700	Annual Pality		124.8	142.1
9	118.2	3,553	2,950	White cargo	ORDO FINIS	26.3	30.1
10	144.7	10,290 -	3,600	WMB care	-	61.5	71.1
11	478.5	33,315	11,975	MAD CITS	CARD COMP	45.2	69.6
12	3,233.4	74,233	80,825	6,592	8%	4.5	23.0
13	843.8	38,185	21,100	PAGE TIME	Crist embe	39.0	45.2
State	13,596.9	319,427	341,970	22,543	6%	15.1	23.5

(134,675\*\*)

<sup>\*\*</sup> PROJECT 70 Proposals and other State acquisition plans \*\*\* Cumulative regional deficit

# STATE AND LOCAL OPEN SPACE PROPOSALS

STATE PARKS			GAM	E LANDS	FISH LANDS		
		Cost		Cost		Cost	
		Estimates		Estimates		Estimates	
Region	Acreage	(Thousands)	Acreage	(Thousands)	Acreage	(Thousands)	
_					_		
1	20,361	27,682			25	251	
2	8,879	3,958	2,000	1,000	450	209	
3	000 to	rates cons	~-		100	26	
4	2,250	275			150	132	
5	12,845	2,752	1,500	175	1,362	423	
6	10,748	4,532	5,544	1,745	351	188	
7	30	750	1,000	125	1,270	348	
8	10,000	2,872	1,684	34	252	127	
9	500	150			erca esse	220	
10	100	2,717	~~			== ==	
11	10,204	1,100	4,924	99	180	111	
12	61,339	8,274	3,900	550	722	303	
13	11,470	2,935	3,960	550	4,680	328	
State	148,726	57,997	24,512	4,278	9,792	2,666	

	Total St	ate Proposals	Local Proposals			
		Cost Estimates		Cost Estimates		
Region	Acreage	(Thousands)	Acreage	(Thousands)		
1	20,386	27,933	19,390	52,540		
2	11,329	5,167	15,521	5,957		
3	100	26	287	191		
4	2,400	407	2,093	304		
5	15,707	3,350	18,105	6,119		
*	16,643	6,465	17,288	8,590		
272 <sub>1</sub>	2,300	1,223	4,056	715		
8	11,936	3,033	4,860	1,610		
9	750	370	1,710	131		
20	100	2,717	512	103		
11	15,308	1,310	6,550	1,054		
12	65,961	9,127	25,113	23,683		
13	20,110	3,813	48,055	9,937		
State	193,030	64,941	163,541	110,934		

Source:

State Proposals from State Departments
Local Proposals tabulated from PROJECT 70 Letters of Interest

# COMPARISON OF OPEN SPACE

# <u>Potential</u>

(Acres)

	LOCAI		STATE	
Region	Action Program	BOR Survey	Action Program	BOR Survey
1	19,390	10,856	20,386	13,898
2	15,222	2,176	11,329	15,915
3	287	171	100	diago deba
4	2,093	4,178	2,400	4,430
5	18,105	12,342	15,707	14,266
6	17,288	11,365	16,643	4,096
7	4,056	3,166	2,300	421
8	4,860	550	11,936	7,686
9	1,710		750	300
10	512	Office comp.	100	51,815
11	6,550	2,311	15,308	1,258
12	25,113	11,652	65,961	50,426
13	48,055	6,598	20,110	19,976
STATE	163,541	65,365	183,030	184,491

# INVENTORY OF HISTORICAL PROPERTIES IN PENNSYLVANIA

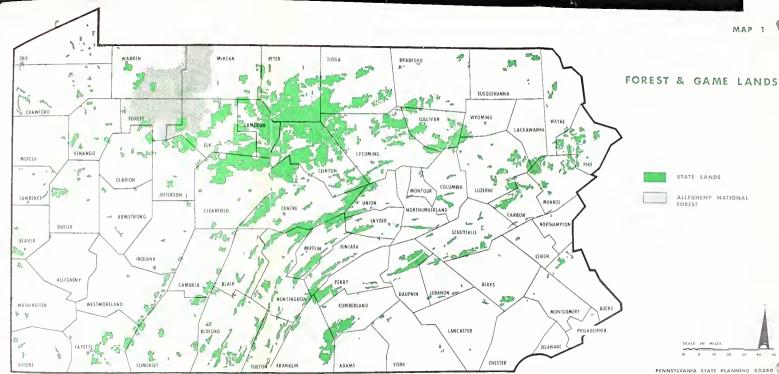
## PROPOSED FOR ACQUISITION OR PRESERVATION

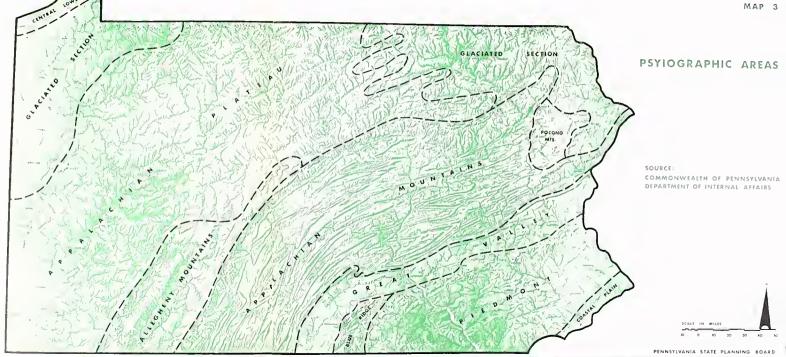
	Map Number	Name
Region 1	1	Chew House
	2	Slate Roof House
	3	Trevose
	4	Durham Jasper Quarry
Region 2	5	Lincoln Homestead
	6	Zeller House
Region 3	7	*⇔Wilmot Houses
	8	Belmont
Region 4	9	Old Mill Village
	10	French Azilum
Region 6	11	Elizabeth Furnace
	12	Schultz Site
	13	**Robert Fulton's Birthplace
	14	Lambs Gap
	15	Haldimans Island
	16	Snow Hill Church
	17	Fort Loudon
	18	McDowells Mills
Region 7	19	Joseph T. Rothrock House
Region 8	20	Eagle Iron Works and Curtin Village
	21	Pine Station
Region 9	22	Lumbering Museum
Region 11	23	Aetna Furnace and Village
	24	Jacks Narrows
	25	East Broad Top Railroad
	26	Shadow Death
	27	Fort Hill
Region 12	28	Fallingwater
	29	₩Friendship Hill
	30	Site of St. Clair House
	31	***Hughes House
	32	∜Stone House Tavern
Region 13	33	Johnston Tavern
	34	Corry Earth Circle
	35	Blockhouse

<sup>\*\*\*</sup>Proposed for acquisition under PROJECT 70

# PROPOSED STATE PARKS

Region	Map Number	Name	Region	Map Number	Name
1	1	Delaware	6	26	Landis Farm Museum
	2.	Jeffords Estate		27	Fulton Birthplace
	3	Brandywine		28	Susquehannock
	4	Marsh Creek		29	Swatara Gap
	5	Valley Forge		30	Dauphin County
	6	Evansburg		31	Codorus Creek
	7	Neshaminy		32	Cumberland County
	8	Tyler Estate		33	Little Buffalo Creek
	9	Nockamixon			
			7	34	Sunbury Access
2	10	Blue Marsh			
	11	Maiden Creek	8	35	Blanchard
	12	Trexler			
	13	Jacobsburg	9	36	Kinzua Bridge
4	14	Browns Creek	10	37	Curwensville
	15	Meshoppen			
			11	38	Canoe Creek
5	16	Aquashicola		39	Laurel Ridge
	17	Beltzville			
	18	Lehigh River Gorge	12	40	Conemaugh Gorge
	19	Tuscarora		41	Yellow Creek
	20	Locust Lake		42	Ohiopyle
	21	Walwallopen		43	Sandy Creek
	22	Nescopeck		44	Buffalo Creek
	23	Francis Slocum		45	Hughes House
	2.4	Scranton Furnaces		46	Ryerson Station
	25	Tunkhannock Creek		47	Washington County
				48	Moraine
				49	Old Stone House
			13	50	Sandy Creek
				51	Oil Creek Gorge
				52	Pymatuning
				53	Elk Creek





# MICH IND N. C.

### REGIONAL SETTING

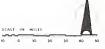
EAST COAST & GREAT LAKES URBAN COMPLEXES



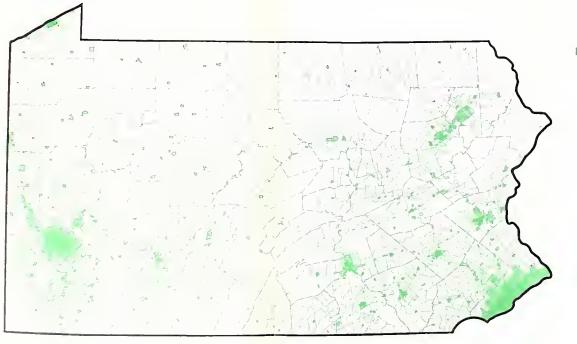
APPALACHIAN MOUNTAINS



'APPALACHIA' REGION

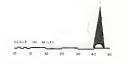


PENNSYLVANIA STATE PLANNING BOARD

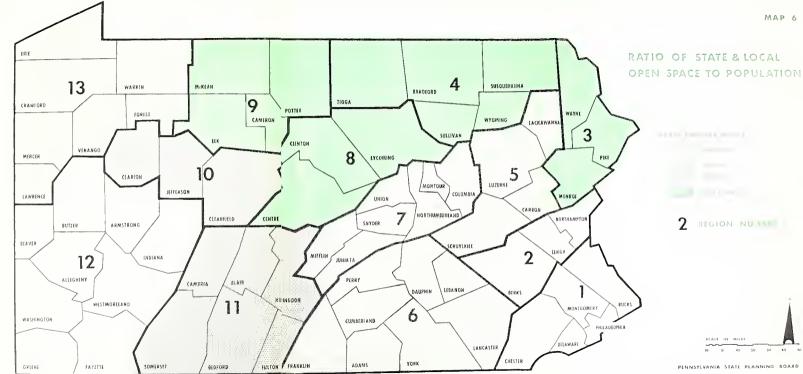


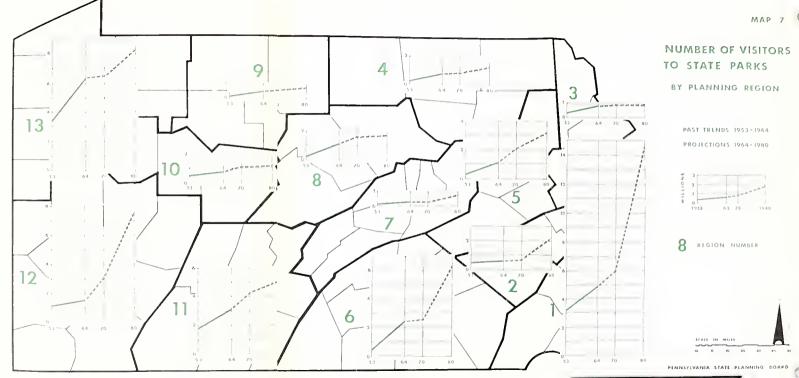
### POPULATION DENSITY BY MINOR CIVIL DIVISION - 1960

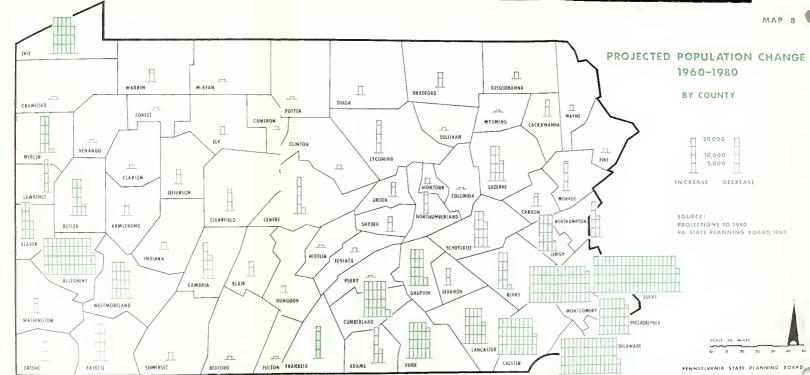


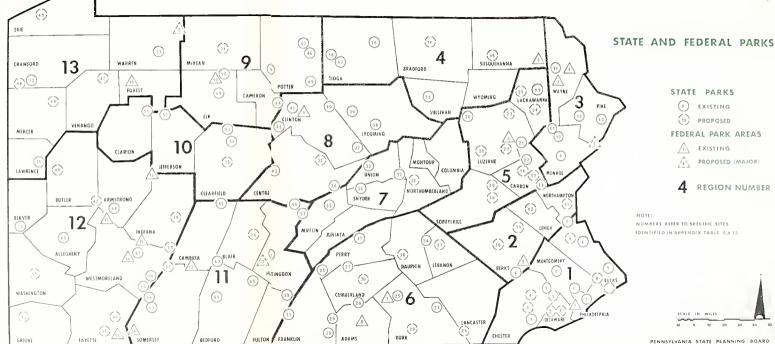


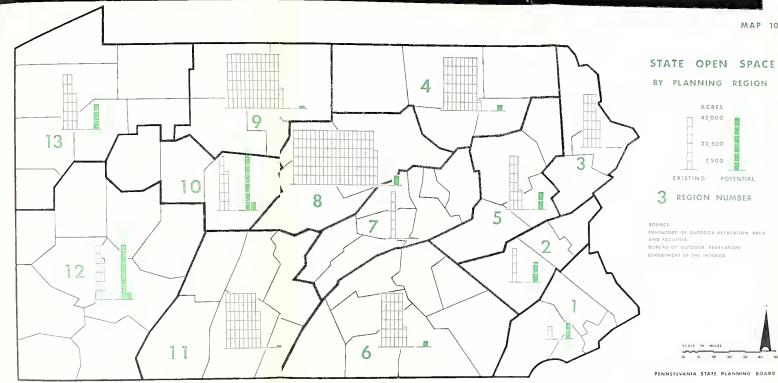
PENNSYLVANIA STATE PLANNING BOARD

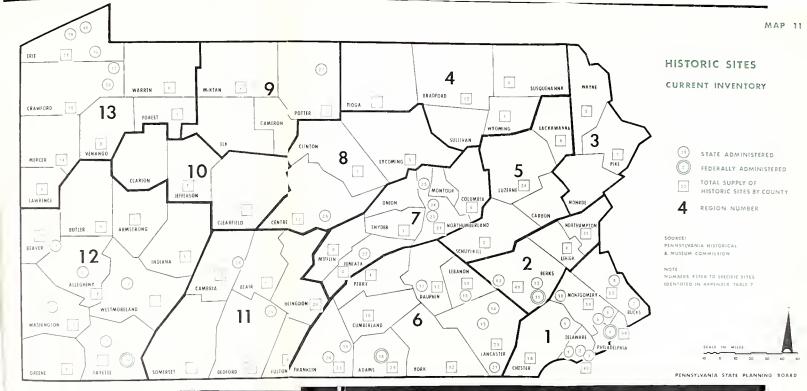


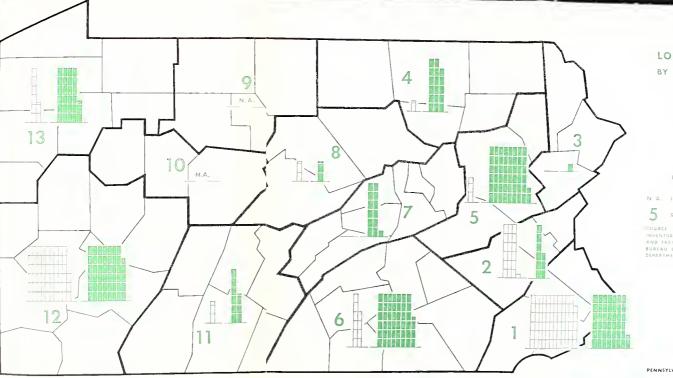












# BY PLANNING REGION

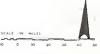
ACRES



N A. INFORMATION NOT AVAILABLE

### REGION NUMBER

INVINIORY OF OUTDOOR RECREAT UN AREAS AND FACILITIES 1094 BUREAU OF OUTDOOR RECREAT ON DEPARTMENT OF THE NIEK-OR



PENNSYLVANIA STATE PLANNING BOARD

